



Letter for your review regarding Silverton Superfund recommendation

Karmen King

to:

Jennifer Lane

09/27/2011 03:18 PM

Hide Details

From: "Karmen King" <kking@aquatox.us>

To: Jennifer Lane/R8/USEPA/US@EPA

1 Attachment



09-27-11, KK Letter to EPA re. Superfund status.docx

Jennifer – thank you for your wiliness to solicit the opinions of Silverton area residents and land owners. If you have any questions, do not hesitate to contact me.

Thank you

Karmen King

**Karmen King**  
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Attn. Jennifer Lane  
EPA Community Involvement Coordinator  
U.S. EPA  
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September 27, 2011

**RE: Recommendations for addressing Cement Creek watershed concerns**

Dear Ms. Lane,

This letter is being provided in response to EPA's request for community input regarding possible recommendations to address water quality concerns associated with the mining related influences to the Cement Creek watershed. Ultimately it appears the concerns are focused upon possible Cement Creek cumulative impacts to the Animas River.

To begin, I am an aquatic toxicologist with 25 years experience dealing with water quality concerns, specifically risk assessment and feasibility studies of CERCLA and RCRA sites. I spent nine years in Leadville working with Mike Holmes, Mike Wireman, Russ Allen and others working with EPA and CDPHE gathering data and interpreting water quality information for the California Gulch Superfund Site. I was also the Lake Fork Watershed Working Group leader for 6 years – working toward proactive community lead water quality remedy projects in the Leadville area. Recently I've worked on the Nelson Tunnel NPL, Barker Hughesville mining district/Montana and Bunker Hill mining complex in Idaho. I currently assist with the environmental compliance and regulatory requirements for several active mines in San Juan and Ouray Counties. I also own the patented claims within Mill Creek basin which encompass the Silver Crown and Silver Cloud mines. To summarize, I am well versed with the CERCLA process, CWA requirements and aquatic sciences in general. I have also dealt with a number of NPL sites where regulatory agencies have not been well received by the local communities (i.e. Smeltertown, CO; Leadville, CO; Blackbird, ID; Bunker Hill, ID and numerous others). Therefore I feel compelled to provide recommendations regarding your approach to address concerns surrounding the Gladstone mining area's water quality issues.

I have compiled a list of recommendations that could be interpreted as goals to any work accomplished to address water quality issues. **From a personal and professional standpoint I strongly oppose a Superfund status for reasons atypical to NPL affected communities.** As a scientist that has been a part of the NPL process I have seen a terrible amount of time and money wasted with these types of investigations and know that the data collected is often fraught with error and cumulative uncertainty. It frightens me to realize that expensive, ineffective remedy designs are often based upon scant amounts of data with very little scientific merit. Therefore, the following recommendations were formulated based upon my background with the CERCLA process and its possible repercussions to the Silverton area community. Please review these recommendations in their order of importance as follows;

- 1.) **Develop a Community-based Review Committee BEYOND the existing Animas Watershed group that contains representatives of the Industrial interests to be a part of the project decision process.** It is critical that community members with a long established understanding of the mine industry setting be a part of this project. It is imperative that members without 'emotionally driven environmental causes' be allowed to voice their concerns and be key to decision process for this project.

2). **Retain the Site Setting for Future Mining Use** - Of utmost importance to any water quality improvement project applied to this historic mining area – it is imperative that the area retain the ability to function as an operable mining setting in the future. Typically, mine reclamation efforts are designed to yield environmentally aesthetic goals thereby prohibiting site access and use. Water quality treatment systems are routinely designed as the 'end use' and encumber the property from future activity. This has to be avoided for this site setting. San Juan County (specifically the Silverton area) is one of the last remaining areas that embraces the mining industry as a viable source of economy. The use of land use exclusion zones (i.e. institutional controls to prohibit the presence of certain types of human activity i.e. residential) should not be applied as a remediation goal.

3.) **Choose Suitable Endpoints associated with the Mixing Zone with the Animas River. Do NOT choose Cement Creek as an endpoint for remedy goal development.** Cement creek's name befits its historic water quality condition. Trying to achieve water quality goals suitable to protect various human health or ecological risk based endpoints is unachievable and inappropriate. Any water quality improvement effort conducted should be designed to address the 'end goal' where Cement creek waters mix with the Animas River. The Animas River segment within the Cement Creek mixing zone is classified as a Cold Water Class II Aquatic Life setting with possible agricultural water supply uses. The ultimate water quality within the Animas should be the focus. Cement Creek water quality conditions are naturally and anthropogenically affected. Whatever actions take place at the Gladstone complex cannot be designed to address these cumulative sources of water quality concern. Therefore – please focus on the Animas River only, and consider the fact that mixing zones of degraded water can still yield a healthy ecosystem. Choose a suitable aquatic life habitat setting below the mixing zone as an area for goal setting where data can be collected routinely (both biotic and abiotic media) in order to measure the efficacy of any remedy action.

4.) **Select Appropriate Water Quality methods (loading) and measures (background concentrations within the Animas) as the water quality goals for any remedy effort implemented.** As a toxicologist I recognize the limitations and uncertainties associated with the use of water quality standards protective of aquatic life. I have served as a member of the Arid West Water Quality scientific advisory team for over 11 years documenting the limitations imposed by these toxicologically based values. The criteria are not a 'one size fits all' numeric solution to a water quality problem. If the 'goal' to the remedy efforts is to 'sustain aquatic life' within the Animas River, then Animas River specific measures need to be used as the measures for this process. Again, I highly recommend that the Animas River background water quality be used as a measure of project success.

I appreciate your willingness to actively participate with the Silverton community regarding this issue, and appreciate the chance to voice my concerns and recommendations. I strongly recommend that these communication channels remain open. If you have any questions or require further clarification of the above summarized recommendations, please do not hesitate to contact me directly.

Sincerely;

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February 1, 2012

Ref: OCPI

Karmen King  
Grayling, LLC  
18050 Rd G  
Cortez, CO 81321

RE: Upper Cement Creek, Silverton, Colorado

Dear Ms. King:

Thank you for your September 27, 2011 letter regarding Upper Cement Creek. We also thank you for sharing specific recommendations to address the watershed.

As you may be aware, we have heard from industry, citizens and other stakeholders who have voiced interest in working collaboratively to address water quality in Upper Cement Creek. We'd like to assure you that the United States Environmental Protection Agency (EPA) has not made a decision concerning listing of the Upper Cement Creek area. The decision to propose a site for the National Priorities List (NPL) can only be made after a technical evaluation is completed to determine if the site is eligible. The EPA is just completing this technical evaluation. In addition, both the State and the EPA seek community support prior to a site being proposed for listing and the EPA wants the community to understand why we are looking at this option.

More than 15 years ago the EPA committed to a community-based environmental protection effort in San Juan County, and indicated that Superfund would not be used as long as progress was being made in improving water quality in the Animas River. Unfortunately, water quality has significantly degraded in the Animas River in the last five years. It is evident that historic mine waste in Cement Creek, a tributary of the Animas River, is having a negative impact on the Animas. These impacts are likely related to cessation of water treatment in Gladstone and plugging of the American Tunnel. EPA has compared the last five years of data to earlier data sets that indicated improvements in water quality. The Animas River Stakeholder Group (ARSG) has summarized some of these data and the EPA is also evaluating these data. If experience in other mining impacted areas is any guide, the resources required for solutions to this sort of problem will be substantial, and long-term operation and maintenance of the solution or solutions may be required.

The EPA is working with other federal agencies, the State, community members and stakeholders to identify options to reverse the degradation and improve water quality in the Animas River. It is too soon to make conclusions about how best to correct this condition. However, if the best solutions require

substantial and long-term resources, CERCLA process and the NPL may be the best means to assure that full resources available to the EPA can be committed. EPA is also limited in its ability to fund interim actions and long-term projects that require ongoing operations and maintenance.

We look forward to continuing the dialogue with you and other citizens and stakeholders regarding possible options to address water quality issues in the Animas River and Upper Cement Creek. If you would like to discuss this further, please contact me at 303-312-6813 or [lane.jennifer@epa.gov](mailto:lane.jennifer@epa.gov).

Sincerely,

Jennifer Lane  
Community Involvement Coordinator

